AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-36 (Cancelled)

Claim 37 (Currently Amended): A process for the manufacture of polymer coated composite substrate, said process comprising:

providing a compressible mat, wherein the compressible mat comprises at least one of fibers and particles in a resin binder composition;

applying on a surface of the compressible mat a chemically crosslinkable primer coating composition ~~onto a surface of a compressible mat~~, wherein the chemically crosslinkable composition forms a chemically crosslinked polymer matrix when, or as, the composition is being applied to the ~~surface of the~~ compressible mat;

applying on the crosslinked polymer matrix a top coat composition comprising a thermoplastic or a thermosetting polymer latex composition to form a top coat layer; and

compressing and heating the crosslinked polymer matrix, the top coat layer, and the compressible mat to form the polymer coated composite substrate.

Claim 38 (Original): The process of claim 37 wherein the compressible mat further comprises a sheet of paper which is glued to the surface of the mat.

Claim 39 (Currently Amended): The process of claim 38 wherein the crosslinked polymer matrix is formed on the paper.

Claim 40 (Cancelled)

Claim 41 (Previously presented): The process of claim 37 wherein the chemically crosslinkable composition is ionically crosslinked.

Claim 42 (Previously presented): The process of claim 37 wherein the chemically crosslinkable composition is covalently crosslinked.

Claim 43 (Currently Amended): The process of claim 41 wherein the chemically crosslinkable composition comprises a ~~has~~ thermosetting polymer ~~functionality~~.

Claim 44 (Currently Amended) A process for the manufacture of polymer coated composite substrate, said process comprising:

providing a compressible mat comprising at least one of fibers and particles and a resin binder composition;

forming a laminate comprising:

(1) a layer of a primer coating composition comprising a crosslinkable polymer, and

(2) a layer of a top coat composition comprising a thermoplastic or a thermosetting polymer latex composition;

contacting the layer of the primer coating composition with a surface of the compressible mat;

compressing the compressible mat and the laminate between heated metal surfaces in a press to form a polymer coated substrate; and

releasing the polymer coated substrate from the press

~~applying an ionically crosslinkable composition onto a surface of a compressible mat, wherein the ionically crosslinkable composition ionically crosslinks to form an ionically crosslinked polymer matrix when, or as, the composition is being applied to the surface of the compressible mat; and~~

~~compressing and heating the matrix and the mat to form the polymer coated composite substrate~~.

Claim 45 (Original): The process of claim 44 wherein the compressible mat further comprises a sheet of paper which is glued to the surface of the mat.

Claim 46 (Currently Amended): The process of claim 45 wherein the layer of the primer coating forms a crosslinked polymer matrix ~~is formed~~ on the paper.

Claim 47 (Cancelled)

Claim 48 (Previously Presented) The process of claim 44 wherein the crosslinkable composition has thermosetting functionality.

Claim 49 (Cancelled).

Claim 50 (Currently Amended): The process of claim 37, further comprising applying a release coat composition on the top coat composition.

Claim 51 (Previously presented): The process of claim 37, wherein the chemically crosslinkable composition has a solids content from about 30% to about 80% by weight.

Claim 52 (Previously presented): The process of claim 37, wherein the chemically crosslinkable composition has a solids content from about 20% to about 70% by weight.

Claim 54 (Currently Amended): The process of claim 44, further comprising applying a release coat composition on the top coat composition.

Claim 55-62 (Cancelled)

Claim 63 (New) A process for the manufacture of polymer coated composite substrate, said process comprising:

forming a laminate by:

(1) applying on a heated platen a layer of a top coat composition comprising a thermoplastic or a thermosetting polymer latex composition, and

(2) applying on the layer of the top coat composition a layer of a primer coating composition comprising a crosslinkable water dispersible thermosetting polymer;

transferring the laminate to a compressible mat comprising at least one of fibers and particles and a resin binder composition; and

compressing the compressible mat and the laminate to form a polymer coated substrate.

Claim 64 (New) The process of claim 63, wherein the compressible mat further comprises a paper overlay, and the laminate is applied to the overlay.

Claim 65 (New) The process of claim 64, further comprising applying an adhesive to the overlay prior to application of the laminate.

Claim 66 (New) The process of claim 63, further comprising a release coating between the metal platen and the layer of the top coat composition.